

REMARKS/ARGUMENTS

These remarks are made in response to the Office Action of October 31, 2006 (hereinafter Office Action). As this response is timely filed within the Three-Month Shortened Statutory Period, no fee is believed due. The Office, however, is expressly authorized to charge any fees due to Deposit Account No. 50-0951.

In the Office Action, Claims 1-8, 11-13, 15-17, 46-53, 56-58, 60-62, 64-66, and 69-71 were rejected under 35 U.S.C. § 103 (a) as being unpatentable over U.S. Patent No. 6,064,959 to Young, *et al.* (hereinafter Young), in view of U.S. Patent No. 6,430,551 to Thelen, *et al.* (hereinafter Thelen). Claims 14 and 59 were rejected under 35 U.S.C. § 103 (a) as being unpatentable over Young, in view of Thelen, and further in view of U.S. Patent No. 5,799,273 to Mitchell, *et al.* (hereinafter Mitchell). Claims 18 and 63 were rejected under 35 U.S.C. § 103 (a) as being unpatentable over Young, in view of Thelen, and further in view of U.S. Patent No. 5,680,511 to Baker, *et al.* (hereinafter Baker). Additionally, Claims 1-8, 11-18, 46-53, 56-66, and 69-71 were rejected under 35 U.S.C. § 112, first paragraph.

In response, Applicants have amended independent Claims 1, 46, and 64 to further emphasize certain aspects of the invention. The claims also have been amended to address the issues raised in the Office Action with respect to 35 U.S.C. § 112, first paragraph. The claim amendments, as discussed in the following section, are fully supported throughout the Specification. No new matter has been added through the claim amendments.

Aspects of The Invention

At this juncture, it may be useful to reiterate certain aspects of Applicants' invention. One embodiment of the invention, typified by Claim 1, as amended, is a method of recognizing speech using a computer system.

The method can include receiving non-voice input sent to a user from a different user. (See, e.g., Specification, p. 8, lines 9-11.) More particularly, the input received by the user can include, for example, text contained in an e-mail, information contained in a document attached to an e-mail, information contained in a document viewed on a display of a computer system, information contained in a plurality of linked documents accessible to the computer system, information contained in a spread sheet executing on the computer system, facsimile information received via a facsimile device connected to the computer system, call center information received via a calling device connected to the computer system, and/or information recorded by a web browser executing on the computer system.

Based upon the information received by the user, a word list, defining a context-enhanced database, can be created. Alternatively, the word list so created can be added to, and thereby modify, an existing context-enhanced database. (See, e.g., Specification, p. 10, lines 9-19.)

Moreover, both the created content-enhanced database and the modified context-enhanced database can be dynamically generated. Specifically, the content-enhanced databases can be dynamically generated based on one or more current activities performed by the user on the computer system and/or one or more past activities performed by the user on the computer system within a predetermined time interval. (See, e.g., Specification, p. 10, lines 15-19; see also p. 8, lines 4-16, and p. 11, lines 19-24.)

The method can further include preparing a first textual output from a speech signal by performing a speech recognition task to convert the speech signal into the first textual output. The context-enhanced database can then be accessed to improve the speech recognition rate. The speech signal can be parsed into a plurality of computer processable speech segments. The first textual output can include a plurality of text

segments, each corresponding to one of the computer processable speech segments. Selective ones of the text segments can be generated by matching each computer processable speech segment against an entry within the context-enhanced database.

Additionally, the context-enhanced database can include a plurality of entries, each comprising a speech utterance and a corresponding textual segment for the speech utterance. The method, moreover, can include enabling the editing of the first textual output to generate a final, voice-generated output.

The Claims Define Over The Cited References

Claims 1, 46, and 64, as noted above, were each rejected as being unpatentable over Young in view of Thelen. Young is directed to correcting erroneous text associated with errors that occur during a speech recognition process. As previously noted, Young utilizes a "constraint grammar" that is activated when a user "opens" a particular application program "associated" with the constraint grammar. (See Col. 4, line 52 – Col. 5, line 4.) Such a grammar has its own vocabulary, which strictly corresponds to a predetermined "dictation topic." The vocabulary thus comprises terms pertinent to a specific topic. Although different topics can be selected by a user, the actual terms must be determined beforehand; that is, the vocabulary is dictated by the particular topic with which it is associated. An example of such a vocabulary is a vocabulary of known medical terms. Another is a vocabulary of legal terms. (See Col. 5, lines 55-63; and Col. 6, lines 33-40.)

As previously noted by Applicants, Young's grammars and vocabularies are each created in accordance with a particular application program or a particular topic. It follows, therefore, that Young's types of vocabularies differ fundamentally from the context-enhanced databases created by Applicants' invention.

Thelen is cited in the Office Action as teaching that a vocabulary or language model can be created from documents distributed over several servers connected over the Internet. (See Col. 3, line 20 to Col. 4, line 27; and Col. 6, lines 11-45.) Applicants respectfully note, however, that Thelen neither teaches nor suggests generating either a vocabulary or language model based upon received input, the input being received by a system user after it has been sent to the user by a different user.

With respect to Thelen, the documents deemed relevant for creating the vocabulary or language model are those that correspond to a predetermined topic or category. Specifically, as noted in the Office Action, Thelen suggests that vocabulary or language model is created based upon documents relevant to a specific category of user, such as a surgeon, radiologist, or legal practitioner. Applicants respectfully submit again, however, that Thelen does not teach or suggest creating or modifying a context-enhanced database as recited in the amended claims.

Neither Young nor Thelen teach or suggest creating a word list defining a context-enhanced database or modifying an existing context-enhanced database based upon input *received* by a user. Indeed, Thelen explicitly relies on input *provided* by the user. Thelen searches among different documents according to a "search criterion" that is derived from a context identifier, but the context identifier is specified by the user:

"[T]he context identifier comprises a keyword, which acts as the search criterion. For instance, the (prospective) user of a pattern recognition system specifies one or more keywords, based on which the documents are selected." (Col. 3, lines 44-48.) (Emphasis Supplied.)

Similarly, in another embodiment, Thelen expressly relies, not on input received by a user, but rather input supplied by the user himself or herself:

"the context identifier indicates a sequence of words, such as a phrase or a text. From this sequence of words, one or more keywords are extracted, which act as the search criterion. For instance, the (prospective) user of a pattern recognition system specifies one or more documents representative of his interests. Keywords are extracted from the documents, and additional documents are selected based on the keywords. In this way, the user is relieved from choosing keywords." (Col. 3, lines 49-58.) (Emphasis Supplied.)

And in yet another embodiment, Thelen again relies on specific selection of information provided directly by a user rather than relying on input received by a user from a different user, as recited in the amended claims:

"the set of documents is formed by a document database or document file system. As an example, a large volume storage system, such as a CD-ROM or DVD, containing a large and diverse set of documents may be supplied with the pattern recognition system, allowing the (prospective) user to select pertinent documents from this set." (Col. 3, lines 59-65.) (Emphasis Supplied)

More fundamentally, neither Thelen nor Young teach or suggest creating or otherwise modifying a context-enhanced database based upon a user's performing on the system one or more current or past activities of the type explicitly recited. In particular, the references do not teach or suggest creating or modifying a context-enhanced database based upon one or more of the following activities performed on the system by a user: sending or receiving an e-mail; displaying a document contained in an e-mail; displaying

information contained in a spread sheet executing on the computer system; receiving facsimile information via a facsimile device connected to the computer system; receiving call center information via a calling device connected to the computer system; and/or receiving information recorded by a web browser executing on the computer system.

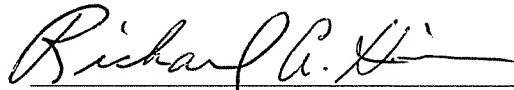
Accordingly, neither Young nor Thelen, alone or in combination, teaches or suggests each of the features recited in independent amended Claims 1, 46, and 64. Applicants, therefore, respectfully submit that Claims 1, 46, and 64 each define over the prior art. Applicants further respectfully assert that whereas each of the remaining dependent claims depends from one of amended Claims 1, 46, or 64 while reciting additional features, the dependent claims likewise define over the prior art.

CONCLUSION

Applicants believe that, in view of the claim amendments presented herein, this application is now in full condition for allowance, which action is respectfully requested. The Applicants request that the Examiner call the undersigned if clarification is needed on any matter within this Amendment, or if the Examiner believes a telephone interview would expedite the prosecution of the subject application to completion.

Respectfully submitted,

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Gregory A. Nelson, Registration No. 30,577
Richard A. Hinson, Registration No. 47,652
AKERMAN SENTERFITT
Customer No. 40987
Post Office Box 3188
West Palm Beach, FL 33402-3188
Telephone: (561) 653-5000